

## ABSTRACT

Conformational epitopes of the envelope protein E2 of the Hepatitis C virus (HCV) have been identified and characterized using a panel of monoclonal antibodies derived from patients infected with HCV. These conformational epitopes have been determined to be important in the immune response of humans to HCV and may be particularly important in neutralizing the virus. Based on the identification of these conformational epitopes, vaccines containing peptides and mimotopes with these conformational epitopes intact may be prepared and administered to patients to prevent and/or treat HCV infection. The identification of four distinct groups of monoclonal antibodies with each directed to a particular epitope of E2 may be used to stratify patients based on their response to HCV and may be used to determine a proper treatment regimen.